AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1-64. (Cancelled)

65. (New) A method of transmission power control, comprising the steps of:

detecting oscillation in an uncompensated transmission power level corresponding to an established transmission power control command sequence; and,

compensating the established transmission power control command sequence for the oscillation in the uncompensated transmission power level, comprising the step of injecting of a compensating sequence to, or blocking of one or more frequency components of, the established transmission power control command sequence.

66. (New) The method according to claim 65, wherein the step of compensating further comprises injection of a compensating sequence to the established transmission power control command sequence, thereby forming a compensated transmission power control command sequence.

67. (New) The method according to claim 66, wherein the compensating sequence is generated in a neural network.

68. (New) The method according to claim 67, wherein the compensating sequence is generated by means of back-propagation.

69. (New) The method according to claim 66, wherein the compensating sequence is generated by concatenating one or more pre-defined sequences.

70. (New) The method according to claim 66, wherein the compensating sequence is generated by concatenating one or more pseudo-random sequences.

71. (New) The method according to claim 66, wherein the compensated transmission power control is achieved by adding modulo-2 of a compensating sequence to the established transmission power control command sequence.

72. (New) The method according to claim 71, wherein the sequences' one or more components are either 0 or 1, or a multiple thereof.

73. (New) The method according to claim 66, wherein the compensated transmission power control is achieved by component-wise multiplication of a compensating sequence to the established transmission power control command sequence.

74. (New) The method according to claim 73, wherein the sequences' one or more components are either +1 or -1, or a multiple thereof.

75. (New) The method according to claim 65, wherein the step of compensating comprises blocking of one or more frequency components of the established transmission power control command sequence thereby forming a compensated transmission power control command sequence.

76. (New) The method according to claim 75, wherein the blocking is achieved by means of filtering.

77. (New) The method according to claim 76, wherein one or more transmission power control command components representing one or more frequencies greater than the oscillation frequency of the oscillations in the corresponding transmission power level are filtered out, entirely or partially if power of frequency components above the oscillation frequency are greater than power of frequency components below, and that one or more transmission power control command components representing one or more frequencies essentially equal to the oscillation frequency are filtered out essentially entirely.

78. (New) The method according to claim 76, wherein one or more transmission power control command components representing one or more frequencies essentially equal to the oscillation frequency of the oscillations in the corresponding transmission power level are filtered out, essentially entirely, if power of frequency components below the oscillation frequency are greater than power of frequency components above.

79. (New) The method according to claim 75, wherein the blocking is achieved by means of canceling frequency transform coefficients of a frequency transformed signal.

80. (New) The method according to claim 75, wherein one or more frequency components below a frequency threshold are blocked.

81. (New) The method according to claim 80, wherein one or more frequency components of energy larger than energy of frequency content above the threshold are blocked.

82. (New) The method according to claim 80, wherein the frequency threshold is set essentially equal to the oscillation frequency.

83. (New) The method according to claim 65, wherein oscillation is detected by means of frequency analysis.

84. (New) The method according to claim 65, wherein loop delay is estimated in relation to oscillation cycle time.

85. (New) The method according to claim 84, wherein loop delay is estimated to be essentially equal to one fourth of the cycle time.

86. (New) The method according to claim 65, wherein identified oscillation is compensated until the number of identical transmission power control commands of the established transmission power control command sequence exceeds a threshold.

87. (New) The method according to claim 86, wherein the threshold corresponds to essentially four times the loop delay.

88. (New) The method according to claim 65, wherein oscillations of one or more radio links, for which transmission power level and cell interference are correlated to a greater extent than indicated by a predefined threshold, are compensated for.

89. (New) The method according to claim 65, wherein the oscillations are compensated at the receiver.

90. (New) The method according to claim 89, wherein the receiver is a radio base station, or is included in or connected to a radio base station.

91. (New) The method according to claim 89, wherein the receiver is a mobile station, or is included in or connected to a mobile station.

92. (New) The method according to claim 65, wherein the oscillations are compensated at the transmitter.

93. (New) The method according to claim 92, wherein the transmitter compensates received respective transmission power control commands of different mobile stations adjusted for its peak transmission power capacity.

94. (New) The method according to claim 92, wherein the transmitter is a radio base station, or is included in or connected to a radio base station.

95. (New) The method according to claim 92, wherein the transmitter is a mobile station, or is included in or connected to a mobile station.

96. (New) An apparatus for transmission power control, comprising:

an oscillation detector; and,

oscillation compensating means for compensating for oscillations as detected in corresponding uncompensated commanded transmission power level of one or more established transmission power control command sequences, the compensating means injecting a compensating sequence to, or blocking one or more frequency components of, the established transmission power control command sequence.

97. (New) The device according to claim 96, wherein the compensating means comprises a processing element for performing component-wise algebraic operations on a compensating sequence and the established transmission power control command sequence to form a compensated transmission power control command sequence.

98. (New) The device according to claim 97, further comprising a neural network for generating the compensating sequence.

99. (New) The device according to claim 98, wherein the neural network comprises a back-propagation arrangement.

100. (New) The device according to claim 97, further comprising means for concatenating one or more pre-defined sequences for generating the compensating sequence.

101. (New) The device according to claim 97, further comprising a pseudo-random number generator generating the compensating sequence in whole or part.

102. (New) The device according to claim 97, wherein the processing element performs component-wise algebraic operations being a modulo-2 adder, component-wise adding a compensating sequence to the established transmission power control command sequence.

103. (New) The device according to claim 102, wherein the added sequences' one or more components are either 0 or 1, or a multiple thereof.

104. (New) The device according to claim 97, wherein the processing element performs component-wise algebraic operations being a multiplier, component-wise multiplying a compensating sequence and the established transmission power control command sequence.

105. (New) The device according to claim 104, wherein the sequences' one or more components are either +1 or -1, or a multiple thereof.

106. (New) The device according to claim 96, wherein the compensating means comprises a processing element for blocking one or more frequency components of the established transmission power control command sequence thereby forming a compensated transmission power control command sequence.

107. (New) The device according to claim 104, wherein the compensating means comprises a processing element for blocking one or more frequency components being a filter.

108. (New) The device according to claim 107, wherein one or more transmission power control command components representing one or more frequencies greater than the oscillation frequency of the oscillations in the corresponding transmission power level are filtered out, entirely or partially if power of frequency components above the oscillation frequency are greater than power of frequency components below, and that one or more transmission power control

command components representing one or more frequencies essentially equal to the oscillation frequency are filtered out essentially entirely.

109. (New) The device according to claim 107, wherein one or more transmission power control command components representing one or more frequencies essentially equal to the oscillation frequency of the oscillations in the corresponding transmission power level are filtered out, essentially entirely, if power of frequency components below the oscillation frequency are greater than power of frequency components above.

110. (New) The device according to claim 106, wherein the processing element comprises a frequency transformation entity and blocking is achieved by means of canceling frequency transform coefficients of a frequency transformed signal.

111. (New) The device according to claim 106, wherein the processing element blocks as present one or more frequency components below a frequency threshold.

112. (New) The device according to claim 111, wherein the processing element blocks as present one or more frequency components of energy larger than energy of frequency content above the threshold.

113. (New) The device according to claim 111, wherein the frequency threshold is set equal to the oscillation frequency.

114. (New) The device according to claim 96, wherein oscillation is detected by means of frequency analysis.

115. (New) The device according to claim 96, wherein loop delay is estimated in relation to oscillation cycle time.

116. (New) The device according to claim 115, wherein loop delay is estimated to be essentially equal to one fourth of the cycle time.

117. (New) The device according to claim 96, wherein it compensates for an identified oscillation until number of identical transmission power control commands of the established transmission power control command sequence exceeds a threshold.

118. (New) The device according to claim 117, wherein the threshold corresponds to essentially four times the loop delay.

119. (New) The device according to claim 96, wherein oscillations of one or more radio links, for which transmission power level and cell interference are correlated to a greater extent than indicated by a predefined threshold, are compensated for.

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